

5-3**Skills Practice****Slope-Intercept Form**

Write an equation of the line with the given slope and y-intercept.

1. slope: 5, y-intercept: -3

2. slope: -2 , y-intercept: 7

3. slope: -6 , y-intercept: -2

4. slope: 7 , y-intercept: 1

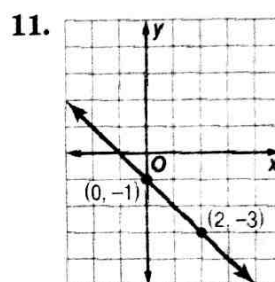
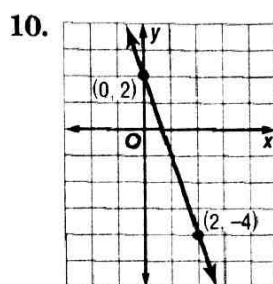
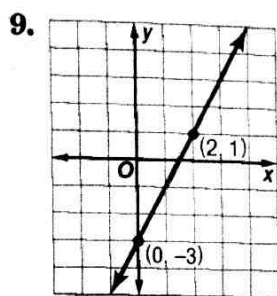
5. slope: 3 , y-intercept: 2

6. slope: -4 , y-intercept: -9

7. slope: 1 , y-intercept: -12

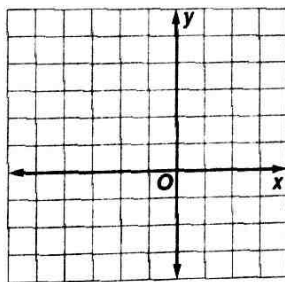
8. slope: 0 , y-intercept: 8

Write an equation of the line shown in each graph.

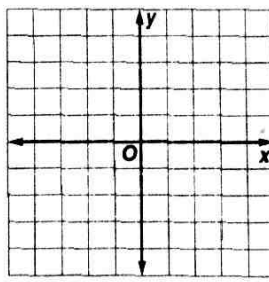


Graph each equation.

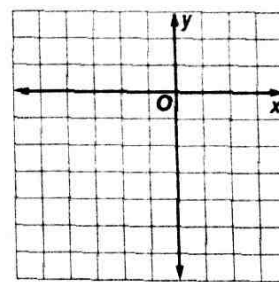
12. $y = x + 4$



13. $y = -2x - 1$



14. $x + y = -3$



Write a linear equation in slope-intercept form to model each situation.

15. A video store charges \$10 for a rental card plus \$2 per rental.

16. A Norfolk pine is 18 inches tall and grows at a rate of 1.5 feet per year.

17. A Cairn terrier weighs 30 pounds and is on a special diet to lose 2 pounds per month.

18. An airplane at an altitude of 3000 feet descends at a rate of 500 feet per mile.

5-3

Practice

Slope-Intercept Form

Write an equation of the line with the given slope and y-intercept.

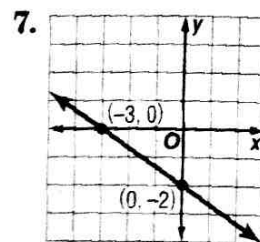
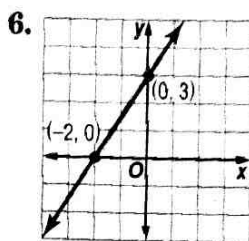
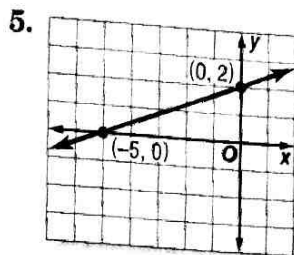
1. slope: $\frac{1}{4}$, y-intercept: 3

2. slope: $\frac{3}{2}$, y-intercept: -4

3. slope: 1.5, y-intercept: -1

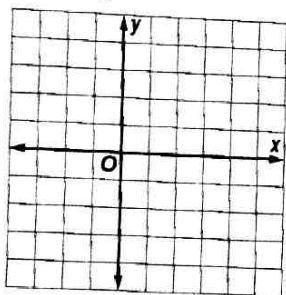
4. slope: -2.5, y-intercept: 3.5

Write an equation of the line shown in each graph.

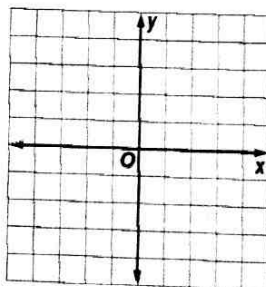


Graph each equation.

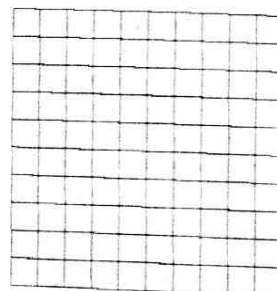
8. $y = -\frac{1}{2}x + 2$



9. $3y = 2x - 6$



10. $6x + 3y = 6$



Write a linear equation in slope-intercept form to model each situation.

11. A computer technician charges \$75 for a consultation plus \$35 per hour.

12. The population of Pine Bluff is 6791 and is decreasing at the rate of 7 per year.

WRITING For Exercises 13–15, use the following information.

Carla has already written 10 pages of a novel. She plans to write 15 additional pages per month until she is finished.

13. Write an equation to find the total number of pages P written after any number of months m .

14. Graph the equation on the grid at the right.

15. Find the total number of pages written after 5 months.

